REMARKS

Claims 1-15 are pending in this application.

Applicant has amended claims 1, 2, 6, 7, and 12-15. In addition, Applicant has made minor changes to the specification. These changes do not introduce any new matter.

Amendments to Claims 1, 2, 6, 7, 12, and 13

In accordance with the Examiner's suggestion, Applicant has amended each of claims 1, 2, 6, 7, 12, and 13 to recite "executed by a processor" rather than "executed by an integrated circuit."

Objection to the Specification

In response to the objection to the specification, Applicant has restored the subject matter deleted from the specification in the Amendment filed on December 12, 2008 (for ease of reference, the restored subject matter includes the recitation "and data signals that include such computer programs and are embodied in carrier waves"). Accordingly, Applicant requests that the objection to the specification be withdrawn.

Rejection Under 35 U.S.C. § 112

Applicant respectfully requests reconsideration of the rejection of claims 1-5 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The feature to which the Examiner has objected ("the determined correspondence relationship in a three-dimensional space") is supported by the specification at, for example, page 21, lines 11-19 (Variation E-1). As specified in the description of Variation E-1, the invention applies not only to cylindrical shapes, but also to spheroidal shapes. As such, the specification demonstrates that Applicant had possession of the claimed subject matter at the time the application was filed. Accordingly, Applicant requests that the rejection of claims 1-5 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Rejection Under 35 U.S.C. § 101

Applicant respectfully requests reconsideration of the rejection of claims 14 and 15

under 35 U.S.C. § 101 as being directed toward non-statutory subject matter. In accordance

with the Examiner's suggestion, Applicant has amended each of claims 14 and 15 to specify a

"tangible computer readable storage medium." Accordingly, Applicant requests that the

rejection of claims 14 and 15 under 35 U.S.C. § 101 be withdrawn.

Rejections Under 35 U.S.C. § 103

Applicant respectfully requests reconsideration of the rejection of claims 1-3, 5, 12,

and 14 under 35 U.S.C. § 103(a) as being unpatentable over *Hsu et al.* ("*Hsu*") (US

6,078,701) in view of *Chen et al.* ("*Chen*") (US 6,486,908 B1). As will be explained in more

detail below, the combination of *Hsu* in view of *Chen* would not have rendered the subject

matter defined in independent claims 1, 12, and 14, as amended herein, obvious to one having

ordinary skill in the art.

Applicant has amended independent claim 1 to specify that the feature point extractor

extracts a feature point which represents an external characteristic of a subject in an image,

from each of the plurality of spheroidal images before overlapping the spheroidal image.

Support for this change can be found in the specification at, for example, page 16, lines 12-

18.

The feature points of the presently claimed subject matter are different from the map

points shown in the *Hsu* reference. The map points of *Hsu* denote corners of the overlap

between the images (typically four points) (see *Hsu* at column 13, lines 18-20). In contrast,

the feature points of the presently claimed subject matter represent an external characteristic

of a subject in an image (see, for example, Applicant's specification at page 16, lines 13-15).

Thus, two images are necessary to extract map points in *Hsu*. In the presently claimed subject

matter, on the other hand, only one image is needed to extract feature points. As such, the

Hsu reference does not disclose or suggest the feature point extractor specified in present claim 1.

In view of the foregoing, even if one having ordinary skill in the art were to combine the *Hsu* and *Chen* references in the manner proposed by the Examiner, the result of this combination would not have included each and every feature of the subject matter defined in present claim 1. As such, the combination of *Hsu* in view of *Chen* would not have rendered the claimed subject matter obvious to one having ordinary skill in the art.

Independent claim 12 defines an image processing method that corresponds to the functionality of the image processing apparatus defined in present claim 1. Independent claim 14 defines a computer program product including a tangible computer readable storage medium having a computer program stored thereon. The computer program causes a computer to implement functionality that corresponds to that of the image processing apparatus defined in present claim 1. As such, the arguments set forth above regarding present claim 1 are also applicable to claims 12 and 14.

Accordingly, independent claims 1, 12, and 14, as amended herein, are patentable under 35 U.S.C. § 103(a) over the combination of *Hsu* in view of *Chen*. Claims 2, 3, and 5, each of which ultimately depends from claim 1, are likewise patentable under 35 U.S.C. § 103(a) over the combination of *Hsu* in view of *Chen* for at least the same reasons set forth above regarding claim 1.

Applicant respectfully requests reconsideration of the rejection of claims 6, 8, and 13 under 35 U.S.C. § 103(a) as being unpatentable over *Lipscomb et al.* ("*Lipscomb*") (US 6,031,541) in view of *Hsu*. As will be explained in more detail below, the combination of *Lipscomb* in view of *Hsu* would not have rendered the subject matter defined in independent claims 6 and 13, as amended herein, obvious to one having ordinary skill in the art.

Applicant has amended independent claim 6 to specify that the feature point extractor extracts a feature point which represents an external characteristic of a subject in an image, from each of the plurality of cylindrical images before overlapping the cylindrical image.

In formulating the obviousness rejection of claim 6, the Examiner relies upon the *Hsu* reference as disclosing the claimed feature point extractor. As discussed above, however, the *Hsu* reference does not disclose or suggest a feature point extractor as specified in the presently claimed subject matter. Thus, even if one having ordinary skill in the art were to combine the *Lipscomb* and *Hsu* references in the manner proposed by the Examiner, the result of this combination would not have included each and every feature of the subject matter defined in present claim 6. As such, the combination of *Lipscomb* in view of *Hsu* would not have rendered the presently claimed subject matter obvious to one having ordinary skill in the art.

Independent claim 13 defines an image processing method that corresponds to the functionality of the image processing apparatus defined in present claim 6. As such, the arguments set forth above regarding present claim 6 are also applicable to claim 13.

Accordingly, independent claims 6 and 13, as amended herein, are patentable under 35 U.S.C. § 103(a) over the combination of *Lipscomb* in view of *Hsu*. Claim 8, which depends from claim 6, is likewise patentable under 35 U.S.C. § 103(a) over the combination of *Lipscomb* in view of *Hsu* for at least the same reasons set forth above regarding claim 6.

Applicant respectfully requests reconsideration of the rejection of claim 4 under 35 U.S.C. § 103(a) as being unpatentable over *Hsu* in view of *Chen* and further in view of *Muramatsu* (US 5,438,380). Claim 4 ultimately depends from claim 1. The deficiencies of the combination of the *Hsu* and *Chen* references relative to the subject matter defined in present claim 1 are discussed above. The *Muramatsu* reference does not cure the above-discussed deficiencies of the combination of the *Hsu* and *Chen* references relative to the

subject matter defined in present claim 1. Accordingly, claim 4 is patentable under 35 U.S.C. § 103(a) over the combination of *Hsu* in view of *Chen* and *Muramatsu* for at least the reason that this claim ultimately depends from claim 1.

Applicant respectfully requests reconsideration of the rejection of claims 7, 9, 11, and 15 under 35 U.S.C. § 103(a) as being unpatentable over *Lipscomb* in view of *Hsu* and *Chen*. Each of claims 7, 9, and 11 ultimately depends from claim 6. Independent claim 15 defines a computer program product including a tangible computer readable storage medium having a computer program stored thereon. The computer program causes a computer to implement functionality that corresponds to that of the image processing apparatus defined in present claim 6. As discussed above, the combination of *Lipscomb* in view of *Hsu* does not disclose each and every feature of present claim 6 for at least the reason that this combination does not include the claimed feature point extractor. The *Chen* reference does not cure this deficiency of the combination of *Lipscomb* in view of *Hsu* relative to the subject matter defined in present claim 6. Accordingly, claims 7, 9, 11, and 15 are patentable under 35 U.S.C. § 103(a) over the combination of *Lipscomb* in view of *Hsu* and *Chen* for at least the same reasons set forth above regarding present claim 6.

Applicant respectfully requests reconsideration of the rejection of claim 10 under 35 U.S.C. § 103(a) as being unpatentable over *Lipscomb* in view of *Hsu*, *Chen*, and *Muramatsu*. Claim 10 ultimately depends from claim 6. The deficiencies of the combination of the *Lipscomb* and *Hsu* references relative to the subject matter defined in present claim 6 are discussed above. Neither the *Chen* reference nor the *Muramatsu* reference cures the above-discussed deficiencies of the combination of the *Lipscomb* and *Hsu* references relative to the subject matter defined in present claim 6. Accordingly, claim 10 is patentable under 35 U.S.C. § 103(a) over the combination of *Lipscomb* in view of *Hsu*, *Chen*, and *Muramatsu* for at least the reason that this claim ultimately depends from claim 6.

Conclusion

In view of the foregoing, Applicant respectfully requests reconsideration and

reexamination of claims 1-15, as amended herein, and submits that these claims are in

condition for allowance. Accordingly, a notice of allowance is respectfully requested. In the

event a telephone conversation would expedite the prosecution of this application, the

Examiner may reach the undersigned at **(408) 749-6902**. If any additional fees are due in

connection with the filing of this paper, then the Commissioner is authorized to charge such

fees to Deposit Account No. 50-0805 (Order No. MIPFP160).

Respectfully submitted,
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